Progress Energy

February 24, 2011

Jocelyn Boyd, Esquire
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of January 2011.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

January 2011

The following units had no off-line outages during the month of January:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Robinson Unit 2
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

January 2011

Roxboro Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 19:22 on January 15, and was returned to service at 19:58 on January 18, a duration of 72 hours and 36 minutes.

B. Cause: Waterwall Tube Leak

C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.

D. Corrective Action: Maintenance activities were conducted to correct the waterwall tube leak. Upon completion of repairs, the unit was returned to service.

Full Forced Outage

A. Duration: The unit was taken out of service at 0:59 on January 23, and was returned to service at 1:44 on January 23, a duration of 45 minutes.

B. Cause: Turbine Trip During Testing

C. Explanation: During turbine valve testing on the unit, the test handle was released before the turbine had reset, which caused the turbine to trip.

D. Corrective Action: Adjustments were made on the turbine, allowing the unit to return to full power. The adjustments were made in a timely manner, and the unit resumed normal operations.

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	965	MW	959	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	725,173	MWH	6,836,183	MWH	2
Capacity Factor	101.00	%	81.41	%	
Equivalent Availability	100.00	%	81.45	%	
Output Factor	101.00	%	98.58	%	
Heat Rate	10,254	BTU/KWH	10,414	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,382,550	16.46	3
Partial Scheduled	0	0.00	93,011	1.11	4
Full Forced	0	0.00	80,199	0.95	5
Partial Forced	0	0.00	68,780	0.82	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	717,960		8,398,650		8

* See 'Notes for Nuclear Units' filed with the January 2011 report.
** Gross of Power Agency

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	953	MW	939	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	701,891	MWH	8,016,010	MWH	2
Capacity Factor	98.99	%	97.43	%	
Equivalent Availability	99.81	%	97.71	%	
Output Factor	98.99	%	98.72	%	
Heat Rate	10,480	BTU/KWH	10,616	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	107,101	1.30	3
Partial Scheduled	1,321	0.19	43,354	0.53	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	5,820	0.82	87,594	1.06	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	709,032		8,227,830		8

* See 'Notes for Nuclear Units' filed with the January 2011 report.
** Gross of Power Agency

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	936	MW	921	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	695,889	MWH	7,086,250	MWH	2
Capacity Factor	99.93	%	87.84	%	
Equivalent Availability	99.54	%	87.42	%	
Output Factor	99.93	%	99.54	%	
Heat Rate	10,504	BTU/KWH	10,686	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	948,278	11.75	3
Partial Scheduled	0	0.00	78,560	0.97	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	3,181	0.46	16,710	0.21	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	696,384		8,067,960		8

* See 'Notes for Nuclear Units' filed with the January 2011 report.
** Gross of Power Agency

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	758	MW	744	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	566,951	MWH	3,592,827	MWH	2
Capacity Factor	100.53	%	55.15	%	
Equivalent Availability	100.00	%	55.15	%	
Output Factor	100.53	%	98.11	%	
Heat Rate	10,461	BTU/KWH	10,836	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,644,116	25.23	3
Partial Scheduled	0	0.00	21,363	0.33	4
Full Forced	0	0.00	1,209,120	18.56	5
Partial Forced	0	0.00	55,166	0.85	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	563,952		6,515,980		8

* See 'Notes for Nuclear Units' filed with the January 2011 report.

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	735	MW	727	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	428,809	MWH	4,829,806	MWH	2
Capacity Factor	78.42	%	75.82	%	
Equivalent Availability	96.91	%	94.51	%	
Output Factor	78.42	%	80.20	%	
Heat Rate	10,697	BTU/KWH	10,505	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	268,017	4.21	3
Partial Scheduled	16,905	3.09	70,271	1.10	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	11,341	0.18	6
Economic Dispatch	101,126	18.49	1,190,693	18.69	7
Possible MWH	546,840		6,369,980		8

* See 'Notes for Fossil Units' filed with the January 2011 report.
** Gross of Power Agency

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	667	MW	667	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	410,594	MWH	3,889,874	MWH	2
Capacity Factor	82.74	%	66.59	%	
Equivalent Availability	88.32	%	73.64	%	
Output Factor	91.79	%	87.60	%	
Heat Rate	8,815	BTU/KWH	8,939	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,205,364	20.63	3
Partial Scheduled	420	0.08	84,723	1.45	4
Full Forced	48,924	9.86	185,098	3.17	5
Partial Forced	8,638	1.74	66,403	1.14	6
Economic Dispatch	27,672	5.58	409,400	7.01	7
Possible MWH	496,248		5,842,190		8

* See 'Notes for Fossil Units' filed with the January 2011 report.

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	698	MW	696	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	430,444	MWH	4,913,257	MWH	2
Capacity Factor	82.89	%	80.60	%	
Equivalent Availability	94.12	%	97.61	%	
Output Factor	82.89	%	81.38	%	
Heat Rate	10,377	BTU/KWH	10,510	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	58,905	0.97	3
Partial Scheduled	15,461	2.98	44,420	0.73	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	15,094	2.91	42,027	0.69	6
Economic Dispatch	58,313	11.23	1,037,511	17.02	7
Possible MWH	519,312		6,096,230		8

* See 'Notes for Fossil Units' filed with the January 2011 report.

	Month of January 2011		Twelve Month Summary		See Notes*
MDC	711	MW	706	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	405,777	MWH	4,454,961	MWH	2
Capacity Factor	76.71	%	72.08	%	
Equivalent Availability	100.00	%	93.39	%	
Output Factor	76.71	%	75.62	%	
Heat Rate	11,106	BTU/KWH	11,598	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	280,406	4.54	3
Partial Scheduled	0	0.00	78,379	1.27	4
Full Forced	0	0.00	9,018	0.15	5
Partial Forced	0	0.00	43,605	0.71	6
Economic Dispatch	123,207	23.29	1,314,256	21.26	7
Possible MWH	528,984		6,180,910		8

* See 'Notes for Fossil Units' filed with the January 2011 report.
** Gross of Power Agency

NOTES FOR FOSSIL UNITS

1. Maximum Dependable Capacity (MDC) in MW: The gross electrical output measured at the output terminals of the turbine generator, during the most restrictive seasonal conditions, minus the normal station service loads.

2. MWH Generated in the Period: The gross electrical output measured at the output terminals of the turbine generator, minus the normal station service loads, during the gross hours of the reporting period.

3. MWH Not Generated Due to Full Scheduled Outages: Calculated by multiplying the full scheduled outage hours (breaker to breaker as reported to NERC) by the MDC rating. This assumes that the unit would be in demand at the time of the outage. However, if the system load was such that the total output of the unit would not be required (due to economic dispatch), the actual MWH not generated due to the outage would be less.

4. MWH Not Generated Due to Partial Scheduled Outages: Calculated by multiplying the partial scheduled outage hours by the MW derating (as reported to NERC). Also included is an estimate of the MWH not generated while reducing power to take the unit off line for a full scheduled outage and the MWH not generated while bringing the unit back to power after the outage (Ramp Time). However, if the system load was such that the total output of the unit would not have been required, the actual MWH not generated due to the outage would be less.

5. MWH Not Generated Due to Full Forced Outages: Calculated by multiplying the full forced outage hours (breaker to breaker as reported to NERC) by the MDC rating. This assumes that the unit would be in demand at the time of the outage. However, if the system load was such that the total output of the unit would not have been required (due to economic dispatch), the actual MWH not generated due to the outage would be less.

6. MWH Not Generated Due to Partial Forced Outages: Calculated by multiplying the partial forced outage hours by the MW derating (as reported to NERC). Included is an estimate of the MWH not generated while reducing power to take the unit off line for a full forced outage and the MWH not generated while bringing the unit back to power after the outage (Ramp Time). However, if the system load was such that the total output of the unit would not have been required, the actual MWH not generated due to the outage would be less.

7. MWH Not Generated Due to Economic Dispatch: Included is an estimate of the MWH not generated due to the unit not being in demand on a System Dispatch basis. System dispatch takes into consideration the reliability and stability of the system as well as economic dispatch since consideration must be given to the mix of generation on line at any one point in time. Also included are estimates of the MWH not generated due to plant conditions (not defined by NERC), which occur from time to time such as: high backpressure, silica in boiler water, phosphate water treatment carryover, instrumentation calibration, and equipment testing.

8. Total MWH Possible in Period: Calculated by multiplying MDC by hours in period.

NOTES FOR NUCLEAR UNITS

1. Maximum Dependable Capacity (MDC) in MW: The gross electrical output measured at the output terminals of the turbine generator, during the most restrictive seasonal conditions, minus the normal station service loads.

2. MWH Generated in the Period: The gross electrical output measured at the output terminals of the turbine generator, minus the normal station service loads, during the gross hours of the reporting period.

3. MWH Not Generated Due to Full Scheduled Outages: Calculated by multiplying the full scheduled outage hours (breaker to breaker as reported to NERC) by the MDC rating. This assumes that the unit would be in demand at the time of the outage. However, if the system load was such that the total output of the unit would not have been required, the actual MWH not generated due to the outage would be less.

4. MWH Not Generated Due to Partial Scheduled Outages: Calculated by multiplying the partial scheduled outage hours by the MW derating (as reported to NERC). Also included is an estimate of the MWH not generated while reducing power to take the unit off line for a full scheduled outage and the MWH not generated while bringing the unit back to power after the outage (Ramp Time). However, if the system load was such that the total output of the unit would not have been required, the actual MWH not generated due to the outage would be less.

5. MWH Not Generated Due to Full Forced Outages: Calculated by multiplying the full forced outage hours (breaker to breaker as reported to NERC) by the MDC rating. This assumes that the unit would be in demand at the time of the outage.

6. MWH Not Generated Due to Partial Forced Outages: Calculated by multiplying the partial forced outage hours by the MW derating (as reported to NERC). Included is an estimate of the MWH not generated while reducing power to take the unit off line for a full forced outage and the MWH not generated while bringing the unit back to power after the outage (Ramp Time). Also included are estimated of the MWH not generated due to plant conditions (not defined by NERC) which occur from time to time such as: preconditioning of fuel, excessive cooling water temperature, and off-peak equipment testing required by the NRC. However, if the system load was such that the total output of the unit would not have been required, the actual MWH not generated due to the outage would be less.

7. MWH Not Generated Due to Economic Dispatch: Included is an estimate of the MWH not generated due to the unit not being fully in demand based on system load conditions. Also included is the MWH not generated on the nuclear plants due to fuel limitations in the cores or the fuel being "stretched" to meet refueling outages.

8. Total MWH Possible in Period: Calculated by multiplying MDC by hours in period.

Run Date 2/18/2011

Plant	Unit	Current MW Rating	January 2010 - December 2010	January 2011	January 2011 - January 2011
Asheville	1	196	73.62	83.12	83.12
Asheville	2	187	69.48	79.42	79.42
Cape Fear	5	148	73.09	87.66	87.66
Cape Fear	6	175	71.91	78.86	78.86
Lee	1	80	64.57	55.03	55.03
Lee	2	80	54.28	66.95	66.95
Lee	3	257	71.35	71.01	71.01
Mayo	1	735	76.61	78.42	78.42
Robinson	1	179	64.62	86.49	86.49
Roxboro	1	374	82.64	79.82	79.82
Roxboro	2	667	66.80	82.74	82.74
Roxboro	3	698	80.13	82.89	82.89
Roxboro	4	711	72.77	76.71	76.71
Sutton	1	98	47.83	58.52	58.52
Sutton	2	107	47.05	59.76	59.76
Sutton	3	411	48.96	64.72	64.72
Weatherspoon	1	49	38.07	41.94	41.94
Weatherspoon	2	49	33.86	35.99	35.99
Weatherspoon	3	79	48.88	53.33	53.33
Fossil System Total		5,280	68.96	76.37	76.37
Brunswick	1	965	81.00	101.00	101.01
Brunswick	2	953	97.24	98.99	98.99
Harris	1	936	87.77	99.93	99.93
Robinson Nuclear	2	758	55.16	100.53	100.53
Nuclear System Total		3,612	80.54	100.10	100.10
Total System		8,892	74.41	86.01	86.01

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period March 1, 2010 through January 31, 2011, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to January 31, 2011

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	23,309,056 MWH
B. Total number of hours during SCPSC test period	B =	8,088 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D =	5,530,632 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 102.4%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2010 to January 31, 2011

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	948,277	1,644,116	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	94,110	34,403	6,609	1,229,752	
Reasonable coast down power reductions (MWH)	0	0	7,476	0	
Reasonable power ascension power reductions (MWH)	55,192	464	68,117	33,132	
Prudent NRC required testing outages (MWH)	42,096	30,506	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,527,181	65,373	1,031,078	2,907,000	
Total reasonable outage time exclusions [carry to Page 1, Line D]					5,530,632